



IFW

Patent
Attorney's Docket No. 0070777-000022

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of) **MAIL STOP: SEQUENCE**
Kye-Seong KIM et al.)
Application No.: 10/582,915) Group Art Unit: To be assigned
Filed: June 14, 2006) Examiner: To be assigned
For: NOVEL MIRNA MOLECULES) Confirmation No.: 7421
ISOLATED FROM HUMAN)
EMBRYONIC STEM CELL)

TRANSMITTAL LETTER FOR RESPONSE TO NOTICE TO COMPLY
WITH SEQUENCE LISTING REQUIREMENTS AND PRELIMINARY AMENDMENT

MAIL STOP: SEQUENCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In complete response to the Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures mailed on April 2, 2007, enclosed please find:

- A Response to Notice to Comply with Sequence Listing Requirement and Preliminary Amendment with paper copy of attached substitute Sequence Listing.
- A diskette containing a computer readable version of the substitute Sequence Listing.
- A Declaration Pursuant to 37 C.F.R. §§ 1.821-1.825.
- A copy of the Notice mailed on April 2, 2007.



UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
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U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/582,915	Kye-Seong Kim	1012679-000123
INTERNATIONAL APPLICATION NO.		
PCT/KR04/03308		
I.A. FILING DATE		PRIORITY DATE
12/15/2004		12/15/2003
CONFIRMATION NO. 7421		
371 FORMALITIES LETTER		
 OC00000023195819		

Sequence listing 6/2/07

1012679-000123
SPMD

BUCHANAN INGERSOLL
SPMD
APR 04 2007
SPMD
 DOCKETED *SPMD*

Date Mailed: 04/02/2007

NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

- The paper or compact disc copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CFR 1.821(e). Applicant must provide a substitute paper or compact disc copy of the "Sequence Listing", **as well as an amendment specifically directing its entry into the application** OR a substitute computer readable form (CRF) copy of the "Sequence Listing". These two items must be the same. Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000).

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ ebc@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.
<https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

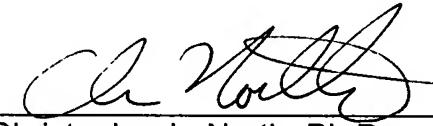
For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(d) and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: May 14, 2007

By: 
Christopher L. North, Ph.D.
Registration No. 50,433

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

visit our website at <http://www.uspto.gov/ebc>.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

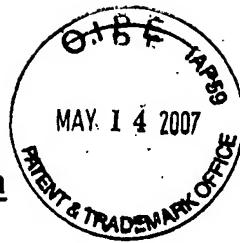
PAULETTE R KIDWELL

Telephone: (703) 308-9140 EXT 216

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/582,915	PCT/KR04/03308	1012679-000123

FORM PCT/DO/EO/922 (371 Formalities Notice)



STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

101582,915

Source:

LEWP

Date Processed by STIC:

6/22/06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

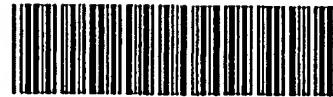
Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06



IFWP

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/582,915.

DATE: 06/22/2006
TIME: 13:08:12

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF4\06222006\J582915.raw

3 <110> APPLICANT: KIM, Kye-Seong
5 <120> TITLE OF INVENTION: Novel miRNA molecules isolated from human
embryonic stem cell
7 <130> FILE REFERENCE: OP04-1083
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/582,915
C--> 9 <141> CURRENT FILING DATE: 2006-06-14
9 <160> NUMBER OF SEQ ID NOS: 99
11 <170> SOFTWARE: KopatentIn 1.71

Does Not Comply
Corrected Diskette Needed

(Pg. 1)

ERRORED SEQUENCES

805 <210> SEQ ID NO: 73
806 <211> LENGTH: 23
807 <212> TYPE: RNA
808 <213> ORGANISM: Homo sapiens
810 <400> SEQUENCE: 73
E--> 811
uaagugcuuc cauguuuung, uuu
1171 <210> SEQ ID NO: 99
1172 <211> LENGTH: 72
1173 <212> TYPE: RNA
1174 <213> ORGANISM: Artificial Sequence
1176 <220> FEATURE:
1177 <223> OTHER INFORMATION: miRNA precursor for miR-374
1180 <400> SEQUENCE: 99
1181
uacaucggcc auuauaaauac aaccugauaa guguuauagc acuuauacaga uuguauugua
1183
auugucugug ua
E--> 1187 20
E--> 1189 1

P/S
explain "N"
locations.

See
error
23 explanation
on page 2

Q P/S delete

VARIABLE LOCATION SUMMARY
PATENT APPLICATION: US/10/582,915

DATE: 06/22/2006
TIME: 13:08:13

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF4\06222006\J582915.raw

Use of n's or Xaa's (NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of <220> to <223> is MANDATORY if n's or Xaa's are present.

in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:73; N Pos. 18,19,22,23

Error Explanation: 2

VERIFICATION SUMMARY DATE: 06/22/2006
PATENT APPLICATION: US/10/582,915 TIME: 13:08:13

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRP4\06222006\J582915.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:811 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:73
L:1187 M:254 E: No. of Bases conflict, this line has no nucleotides.
M:254 Repeated in SeqNo=99